

b) Amendments to the Claims:

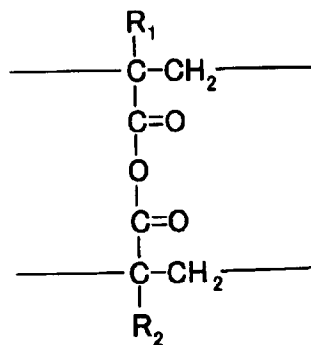
A detailed listing of all the claims that are or were in the application is provided which replaces all earlier listings.

Claims 1. – 14. (Cancelled).

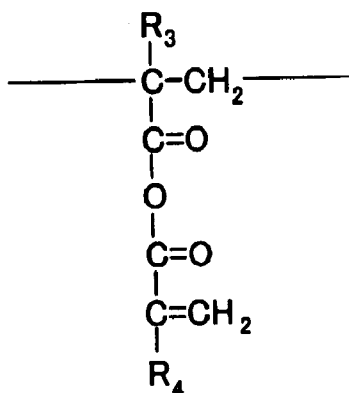
15. (Currently Amended) A method of producing an ink jet head including: a discharge port for discharging ink; an ink flow path which is in communication with the discharge port and has therein an energy generating element for discharging the ink; a substrate on which the energy generating element is formed; and an ink flow path forming member which is provided the substrate to form the ink flow path, the method comprising:

(1) a step of forming a first layer of the photosensitive resin composition comprising an acrylic resin having at least one kind of structural unit represented by formulas 1 and 2

Formula 1



Formula 2



wherein in the general formulae 1 and 2, R₁ to R₄ each independently represent a hydrogen atom or an alkyl group having 1 to 3 carbon atoms and a compound that generates an acid when irradiated with light on the substrate ~~on which the energy generating element is formed;~~

(2) ~~a first photolithographic exposing step of removing exposing~~
a part except a part serving as a first ink flow path pattern of the first layer of the
~~photosensitive resin composition~~ up to a first predetermined depth in a thickness direction,
wherein a reaction for making the exposed part of the first layer positive is at least a
hydrolytic reaction of a carboxylic anhydride in the acrylic resin;

(3) a first removing step of removing the exposed part of the
first layer;

(4) a second exposing step of exposing an outside of a part of
the first ink flow path pattern in the first layer from a position of the first depth to the
substrate, wherein a reaction for making exposed part of the first layer positive in the
second exposing step is at least a main chain decomposition reaction of the acrylic resin;

(5) a second removing step of removing exposed part of the first
layer in the second exposing step to form the second ink flow path pattern in the first layer

to form the first ink flow path pattern composed of a part protruding from the predetermined depth;

(3)——a second photolithographic step of removing a part on the substrate from the photolithographic resin composition except a part serving as a second ink flow path pattern of the layer of the photosensitive resin composition on which the first ink flow path pattern is formed while maintaining a shape of the first ink flow path pattern to prepare a level difference structure in which the first ink flow path pattern is placed on the second ink flow path pattern;

(4)(6) a step of providing on the first layer with the first and second ink flow path pattern forming, on the level difference structure, a coating resin second layer for forming an ink flow path wall;

(5)(7) a step of forming, in the coating resin second layer placed on the energy generating element formed on the substrate, an ink discharge port; and

(6)(8) a step of removing the first layer with the first and second ink flow path pattern to form the flow path, the level difference structure, characterized in that:

the first lithography step includes process steps of exposure, heating after exposure, and development;

a reaction for making the layer of the photosensitive resin composition positive in the first photolithographic step is derived from at least a hydrolytic reaction of a carboxylic anhydride in the acrylic resin;

the second photolithographic step includes process steps of exposure and development; and

~~a reaction for making the layer of the photosensitive resin composition positive in the second photolithographic step is derived from at least a main chain decomposition reaction of the acrylic resin.~~

16. (Currently Amended) A method of producing an ink jet head according to claim 15, wherein an exposure wavelength in the first ~~photolithographic~~ exposing step is longer than an exposure wavelength in the second ~~photolithographic~~ exposing step.

17. (Original) A method of producing an ink jet head according to claim 15, wherein a developer containing: (1) a glycol ether which can be mixed with water at an arbitrary ratio and has 6 or more carbon atoms; (2) a nitrogen-containing basic organic solvent; and (3) water is used as a developer for the positive type photosensitive resin.

18. (Original) A method of producing an ink jet head according to claim 17, wherein the glycol ether comprises at least one kind of ethylene glycol monobutyl ether and diethylene glycol monobutyl ether.

19. (Original) A method of producing an ink jet head according to claim 17, wherein the nitrogen-containing basic organic solvent comprises at least one kind of ethanolamine and morpholine.

Claims 20. – 21. (Cancelled).